

BACKGROUND CONCENTRATIONS FOR INORGANICS IN SOIL

Reference:	Selected Elements (mg/kg)																		
	Al	Sb	As*	Ba	Be	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Ni	Se	Ag	Tl	V	Zn
U.S. Mean Soil (Kabata-Pendras & Pendras 1984)	-	-	6.7	-	-	0.73	-	-	24	-	20	495	0.09	-	0.3	-	-	-	58
U.S. Mean Soil (Adriano 1986)	-	-	7.2	-	-	0.3	-	-	25	-	15	560	0.09	-	0.1 - 2	-	-	-	65
Mean Shale (Bowen 1979)	88,000	1.5	13	550	3	0.22	90	19	39	48,000	23	850	0.18	-	0.5	0.07	1.2	130	120
Western U.S. Soils Mean (Schacklette & Boerngen 1984)	58,000	0.47	5.5	580	0.68	-	41	7.1	21	21,000	17	380	0.05	15	0.23	-	-	70	55
Helena Valley Mean Soil (EPA 1987)	-	-	16.5	-	-	0.24	-	-	16.3	15,248	11.6	336	0.08	-	0.07	-	-	-	46.9
Missoula Lake Bed Sediments (Moore 1985)	-	-	-	-	-	0.2	-	-	25	-	34	406	-	-	-	-	-	-	105
Blackfoot River Sediments (Rice & Ray 1985)	-	-	4	-	-	<0.1	-	-	13	-	-	-	-	-	-	-	-	-	-
Clark Fork Study Site 14 Mean Soil (?)	-	-	16	-	-	0.76	-	-	29	19,270	15	514	0.08	-	<0.35	-	-	-	82

* DEQ has adopted an action level for arsenic in surface soil of 40 mg/kg based upon a statistical analysis of native Montana soil concentrations (April 2005).